Anti-Helicobacter Vaccine Composition Comprising a TH1 Adjuvant

Abstract of the Disclosure

The invention concerns the use of an immunogenic agent derived from Helicobacter, associated with an adjuvant such as QS21 or DC-chol, for making a pharmaceutical composition designed to induce an immune response of the T helper 1 type (Th1), for preventing or treating Helicobacter infection in a mammal.

In the Claims:

Please amend claim 39 to read as follows.

39. (Twice Amended) A method of inducing a T helper 1-type immune response against Helicobacter in a patient, said method comprising administering to the patient an immunogenic agent derived from Helicobacter and a compound that promotes induction of a T helper 1-type immune response against Helicobacter, said immunogenic agent being a preparation of inactivated Helicobacter bacteria, a Helicobacter cell lysate, or a Helicobacter polypeptide or peptide in purified form, and said compound being selected from the group consisting of:

(i) a saponin purified from an extract of *Quillaja saponaria*; and

(ii) a cationic lipid or a salt thereof, wherein said lipid is a weak inhibitor of protein kinase C and has a structure that comprises a lipophilic group derived from cholesterol, a bonding group selected from carboxyamides and carbamoyls, a spacer arm consisting of a branched or unbranched linear alkyl chain of 1 to 20 carbon atoms, and a cationic amine group selected from primary, secondary, tertiary, and quaternary amines, wherein said lipid is not provided in the form of a liposome.